

## CCA-101: Fundamentals of IT & Programming

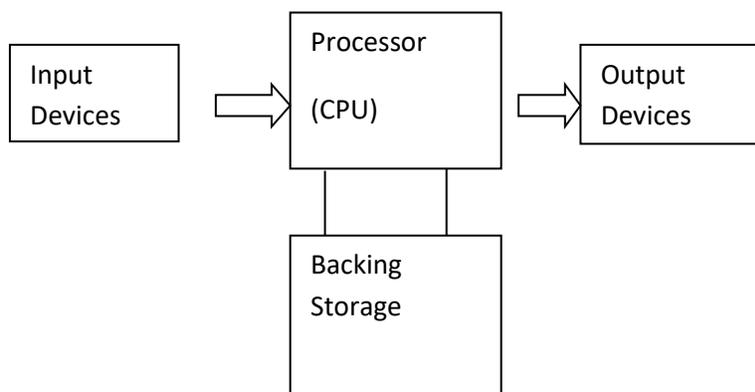
### ASSIGNMENT-1

Q1: What are the four fundamental parts of computer? Explain it with the help of diagram.

Answer:- Four fundamental parts of computer are:-

- (a) Input
- (b) Output
- (c) Central processing unit
- (d) Memory unit

Diagram of computer:-



### Block Diagram of a Digital computer

Q2: Discuss about the classification of computers based on size and capacity.

Answer:- Microcomputers, Minicomputer, Mainframe computers and Supercomputers.

Computers are classified on different parameters, such as storage capacity, processing speed and component (CPU) used in computer. Depending upon the components used and features of different computers, they are classified into four groups.

Q3: What is the meaning of computer generations? How many computer Generations are defined? What technologies were/are used?

Answer:-We are using 5<sup>th</sup> generation of computers

There are five generation of computer.

Generation of computer terminology is a change in technology a computer is/was being used. Initially, the generation term was used distinguish between varying hardware technologies. Nowadays, generation Includes both hardware and software, which together make up an entire computer system.

Q4: Differentiate between volatile s Non-volatile memories.

Answer:-Volatile Memory is used to store computer programs and data that CPU needs in real time and is erased once computer is switched off. RAM and cache memory are volatile memory. Where as Non-volatile memory is static and remains in the computer even if computer is switched off. ROM and HDD are non-volatile memory.

Q5: Distinguish among system software, application software and open source software on the basis of their features.

Answer:- Application software (an application) is a set of computer programs designed to permit the user to perform a group of coordinated functions, tasks, or activities. Application software cannot run on itself but is dependent on system software to execute. Program-A set of instructions telling a computer what to do.

Q6.a) Create a file in MS-word to insert a paragraph about yourself and save it with file name "yourself". Describe all steps in involved in it.

Answer:-It is a very simple process if you do it step. Following are the step to save a file.

(a)Open the file Explorer.

(b)Click on the home teb.

(c)Click on the new item button.

(d)Select a file type.

(e)Enter a name for the file as per your choice or need.

(f)Press the enter button.

(g)Your file will be saved on the desired location.

**Q6.b)Write steps regarding followings.**

### »»To change the font style

Answer:- (a)Select the text you want to modify.

(b)Click on font style box on the home tab. The font style drop- down menu appears.

(c)Move your cursor over the the various font styles.

(d) Left-click the font style you want to use.

(e) Then font style will change in the document.

### »»To change the font size

(a)select the text or cells with text you want to change. To select all text in a you document, press ctrl+A.

(b) On the Home tab, click the font size in the Font size box.

You can also type in any size you want, within the following limits:

(1)Excel: between 1 and 409, between 1 and 409, in multiples of .5(such as 10.5 or 105.7)

(2)Power point: between 1 and 3600, in multiples of .1(such as 10.30 or 105.7)

(3)Word: between 1 and 1638, in multiples of .5(such as 10.5 or 105.5)

#### **Tips:**

- When you select text, a mini toolbar appears near your cursor. You can also change the text size in this toolbar.
- You can also click the increase font size or Decrease font size(Grow font and shrink font in some earlier versions of office programs) icons until the size you want is displayed in the font size.

### »»To change the font color

(a)Select the text you want to modify.

(b)Click on the font color box in the home tab. The font color menu appears.

(c)Move your cursor over the various font colors.

(d)Left-click the the font color you want to use.

(e)Then font color will change in the document.

»»**To highlight(in yellow) the line that reads “need to get IMS’s address**

(a)Drag the mouse over the text you want to highlight. ....

(b)Click the text highlight button again to return the mouse to normal operation.

**Q7. Create a file in MS-Word for the following document and save it with file name “ms-word”. Describe all steps involved in it.**

### Ms-word

⇒ Ms-word is a widely used commercial word processor developed by software.

⇒ MS word is a application software, which is capable of.

- Creating
- Editing
- Saving and
- Printing any type of document

**Q8. Create a file in MS-word for the following document and save it with file name “equation” Describe all steps involved in it.**

### Equation

$$X_2+Y_5=30$$

$$Z^3+Q^4=50$$

$$A_2+B^8=X_2+Y^8$$

Answer:-

Steps to save Document in Word Format

From the File menu, select Save As.....

The Save As dialog box will display.

Choose a location on your computer to save your file. You may want to create a folder to store all your class assignments.

Next to file Type is a drop down menu; select Rich Text Format(. ....

Click Save.

Q9.Cerate a file in MS-word that convert existing highlight text to table as shown below and save it as file name 'text to table'. Describe all steps involved in it.

Select the text you want to convert.

Select the Insert tab.

Click on the Table command. A dialog box appears.

Click on the convert text to table, a new dialog box appears.

Here set numbers of columns.

Click on OK Finally selected text convert in a table.

Select the text you want to convert	Select the Insert tab.
Click on the Table command. A dialog box appears.	Click on the convert text to table, a new dialog box appears.

Here set number of columns.	Click on OK Finally select text convert a table.
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Answer:- Word for Microsoft 365, word for the web, word 2019, More...

For a basic table, click Insert>Table and move the cursor over the grid until you highlight the number of columns and rows you want.

For a larger table, to customize a table, select Insert > Table > Insert Table.

Tips:-

- If already have text separated by tabs. You can quickly convert it to a tables. Select Insert > Table, and than select convert text to table.
- To draw your own table, select Insert > Table > Draw Table.

Q10. Create a file in MS-word to insert a table in the document. Describe all steps involved in it.

Answer:-

(1)Open a blank word document.

(2)In the top ribbon, press Insert.

(3)Click on the Table button.

(4)Either use the diagram to select the number of columns and rows you need, or click Insert Table and a diagram box will appear where you can specify the number of columns and rows.

(5)The blank Table will now appear on the page.

Q11. Create a following worksheet in MS-excel and save it with name 'book1'.

Answer:-Every Excel grandmaster need to start somewhere. In this chapter, you'll learn how to create a basic spreadsheet. First, you'll find out how to move around excel's grid of calls, typing in numbers and text as you go. Next, you'll take quick tour of the excel ribbon, the tabbed to toolbar of commands that sits above your spreadsheet. You'll learn how to trigger the ribbon with a keyboard shortcut, and collapse it out of the MS-excel and save it with name 'book1'.

Q12. Calculate the following things of a range(C2:C11) of data in the worksheet created in question no 10.

>>The sum of the marks using AutoSum in a range of cells (C2:C11)

>>Average of the mark in a range of cells (C2:11)

>>Highest mark in a range of cells (C2:C11)

>>Minimum marks in a range of cells (C2:C11)

Answer:-

- Select the cell where you want to appear function. In this example, select. B8
- Select the drop-down arrow next to the Auto A Sum command on home tab.
- Select Sum A formula will appear in the select cell,B8.
- This formula, =SUM(B4:B7), is Called a function.
- The AutoSum command automatically select the range of cells from B4 to B7, Based on where you inserted the function. You can

after the cell range if necessary. Press the Enter key. The total will appear. To edit a function :-

- Select the cell where the function is defined.
- Insert the cursor in the formula bar.
- Edit the range by deleting and changing necessary cell numbers.
- Click the Enter key.

Q13.a) Describe various steps involved in the following.

Answer:-Main steps involved in the process organizing an organization are: 1. identification and Division of work.

2. Departmentalisation 3. Assignment of Duties 4. Establishing Reporting Relationships!

>>To modify column width of a worksheet

*Answer:-* link to learn the terms [Row, Column and Cell in Excel worksheet](#) before reading the tutorial lesson.

Column width in Excel is a value based on the number of characters that will fit into column width. If you are using Excel default Calibri font with font size 11, the default width of a column in Excel worksheet is 8.43 (64 Pixels). If you change the default font type or size, the default Column width also will change in new [worksheets](#).



>>To modify the row height of a worksheet

1. Answer:-  
On the Home tab, in the Cells group, click Format.
2. Under Cell Size, click Column Width.
3. In the Column width box, type the value that you want.
4. Click Ok

>>To delete rows and columns of a worksheet

1. Answer:- 1. Select the cells, rows, or columns that you want to delete.
- 2.Right-click, and then select the appropriate delete option, for example, Delete Cells & Shift Up, Delete Cells & Shift Left, Delete Rows, or Delete Columns.

Q13.b) Describe following terms in the worksheet.

>> Absolute reference and relative reference in formula.

**Answer:-** Double-click a cell to see the copied **formula** and the **relative cell references**. Create a **formula** that uses an **absolute reference**. If you are using the example, correct the **formula in** cell D4 to refer only to the tax rate **in** cell E2 as an **absolute reference**, then use the fill handle to fill the **formula** from cells D4 to D14.

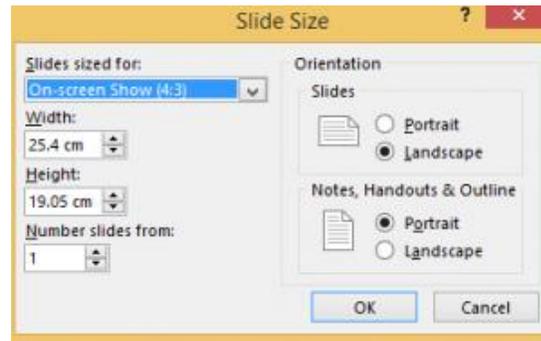
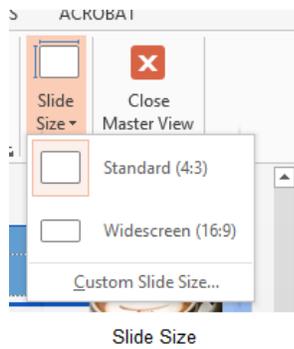
>> Cell address.

**Answer:-** The **cell ADDRESS** function is categorized under Excel Lookup and Reference functions. It will provide a **cell** reference by taking a row and column number. The **cell** reference will be provided as A text string. The function can return an **address** in relative or absolute format and can be used to construct a **cell** reference

Q14.a) What tools are available to customize our power-point presentation?

1. Answer:-  
Select from one of the two options
2. For more choices, click Custom

### 3. Select one of the options



Slide Size box

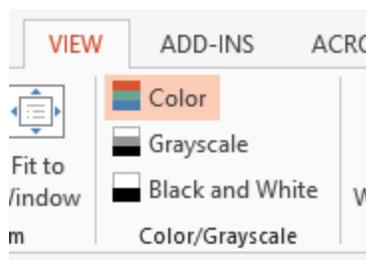
Figure 90 – other options

Figure 89- standard or widescreen

If you change the orientation to Portrait for the presentation it will apply to all the slides.

## Changing to view in color/grayscale

Why change to view the presentation in grayscale? You might want to print the presentation and to print in colour is more expensive than printing to grayscale, so you need to see what the presentation looks like in grayscale before you print.

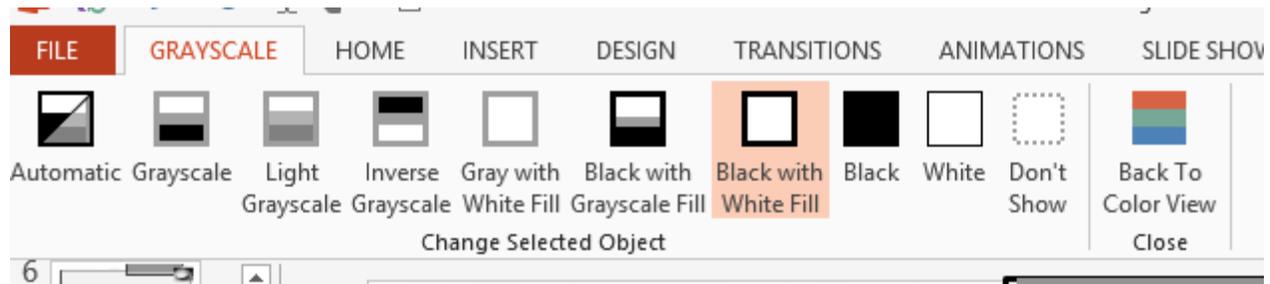


View Grayscale

Figure 91- colour/grayscale options

On the View Ribbon, click on the option you want, Colour, Grayscale or Black and White.

Then from the Grayscale Ribbon select the option you want to see:



Grayscale Ribbon

*Figure 92- grayscale options*

To get back to the colour view, click Back to Colour View.

## Navigating using presentation views

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There are several different views in PowerPoint as we saw earlier and you can navigate through the presentation in each in different ways.

### **In Normal View**

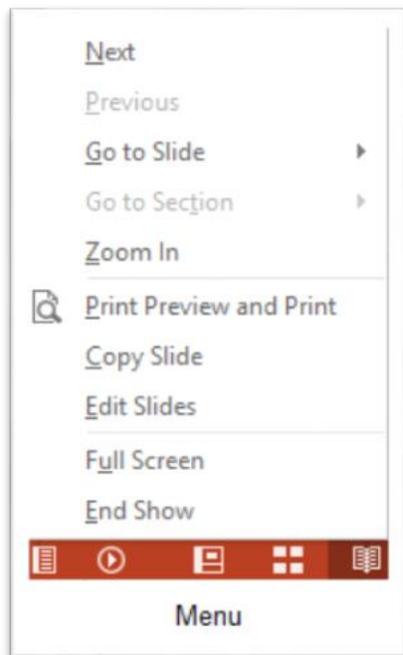
- Click on the thumbnail of the slide you want to see
- Use the Vertical Scrollbar to move between slides
- Use the up and down arrow keys on the keyboard to move one slide backwards or forwards

## In Slide Sorter View

- Click on the slide you want to select
- Use the arrow keys to move up, down, left and right

## In Reading View

Use the next and back icons in the status bar to move back or forwards or use the menu which is accessed from the icon in the middle



*Figure 94 – icons*

Back and Next icons move between slides.

*Figure 93- reading view*

Pick from the menu – you can use Go to Slide to pick the slide number

## In Slide Show view

When presenting you can use the mouse or the arrows on the keyboard to move through the presentation one slide at a time.

You can also type the number of the slide you want to see and press Enter.

When you hover the mouse over the bottom left corner of the slide on display you will notice some faint icons, there is a back arrow and forward arrow which move you through one slide at a time.

*Figure 95- slide show icons*

Use the fourth icon along to show the slides in a presentation view of Slide Sorter View. This lays the slides on the screen and you can click on the one you want to see *Figure 96- Slide Sorter in presentation view*

Use the back arrow at the top left to get back to the slide you started from.

To end the slide show, press the Escape Key on the keyboard – this takes you back to PowerPoint in the edit mode which means that your audience will see the back end of your presentation.

You can also use the End Presentation option which is on the small ellipse icon on the bottom left of the slide when you hover the mouse. *Figure 97- end show and stay in presentation mode*

**We hope you enjoyed this article!**

PowerPoint 2013 has a lot more exciting features. All you have to do is to explore it. Aren't you excited to discover and use these features such as how to [track changes in PowerPoint 2013?](#)

Good luck with your next presentation and don't forget to have a look at the other blog articles for more tips:

- [PowerPoint Presentations: 2 Ways to Make Them More Appealing](#)
- [3 Simple Ways to Make a Creative Design in PowerPoint](#)
- [How to use SmartArt graphics in PowerPoint 2013](#)
- [How to use PowerPoint AND engage your audience](#)
- [How to present a PowerPoint presentation online](#)
- [How to use masters in Power Point 2013](#)
- [How to format text in PowerPoint](#)
- [How to use PowerPoint AND engage your audience](#)

## **PowerPoint 2013**

If you would like to improve your knowledge on PowerPoint 2013, check out the PowerPoint 2013 guide.

[Read now](#)

Q14.b) Write the steps for the following action for create of power point presentation.

»Open a blank presentation

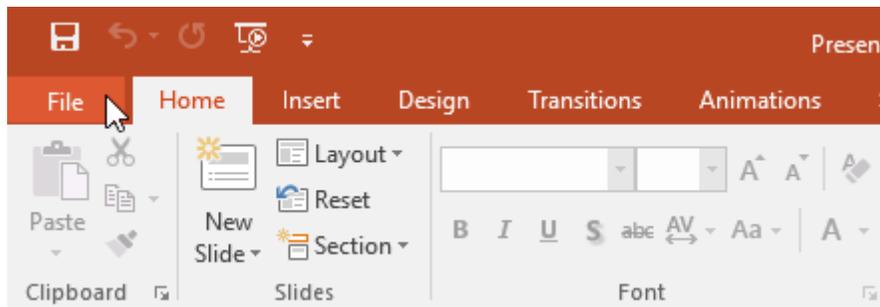
Answer:- PowerPoint, you'll need to **create a new presentation**, which can either be **blank** or from a **template**. You'll also need to know how to **open an existing presentation**.

Watch the video below to learn more about creating and opening presentations in PowerPoint.

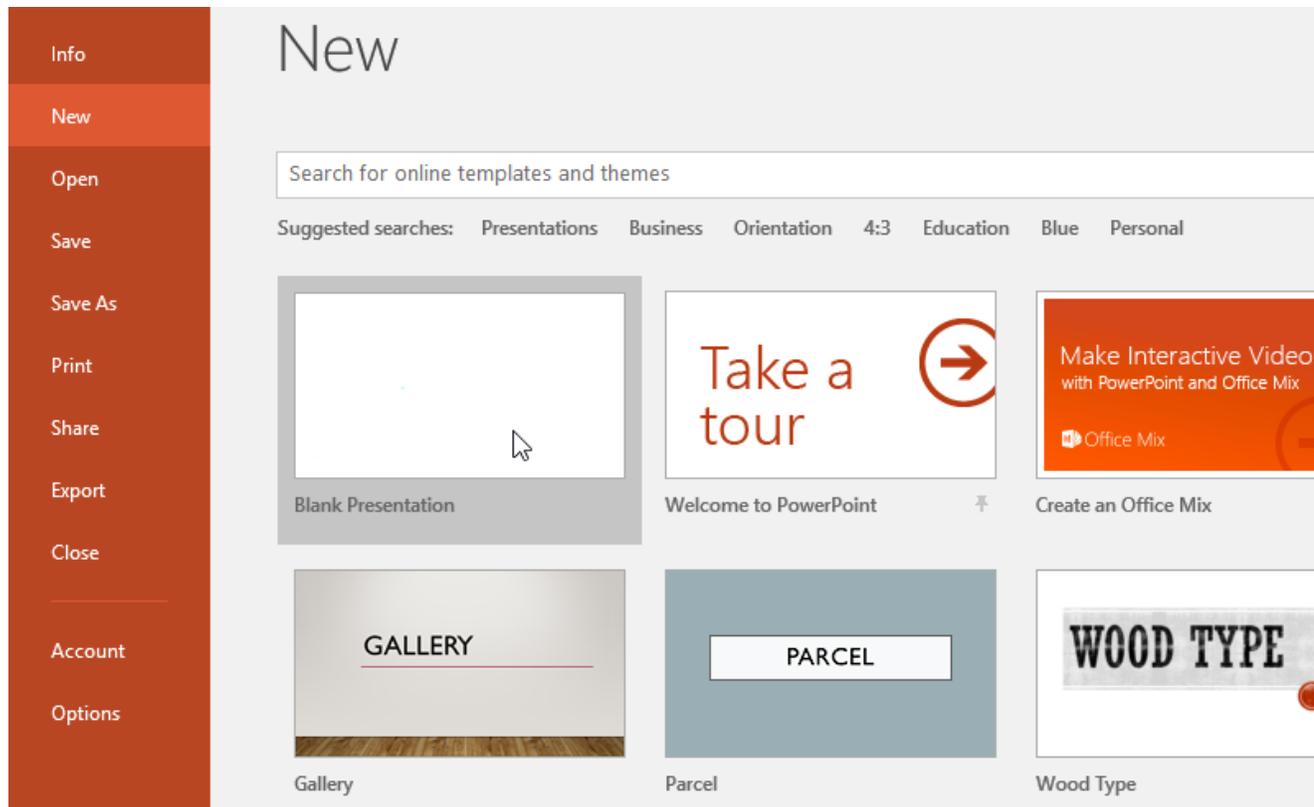
## *To create a new presentation:*

When beginning a new project in PowerPoint, you'll often want to start with a new blank presentation.

1. Select the **File** tab to go to **Backstage view**.



2. Select **New** on the left side of the window, then click **Blank Presentation**.



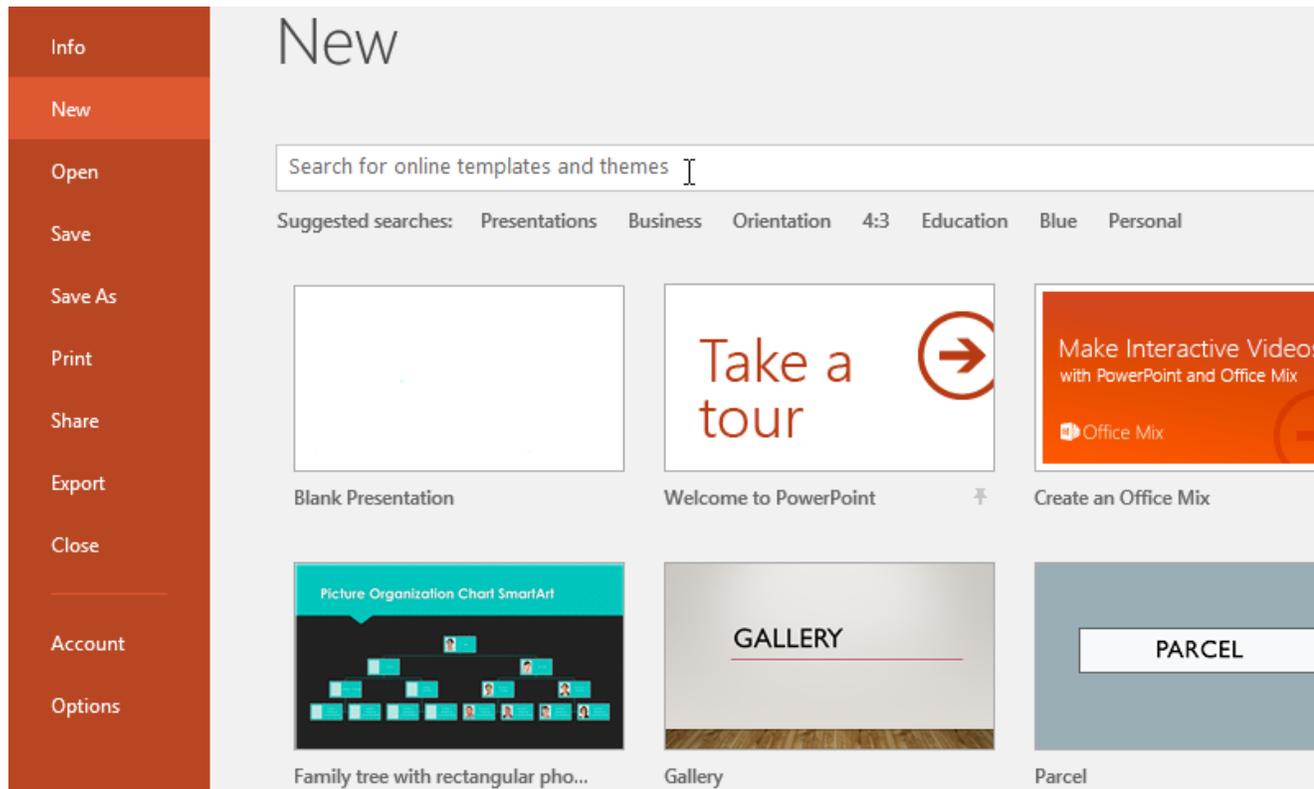
3. A new presentation will appear.

## *To create a new presentation from a template:*

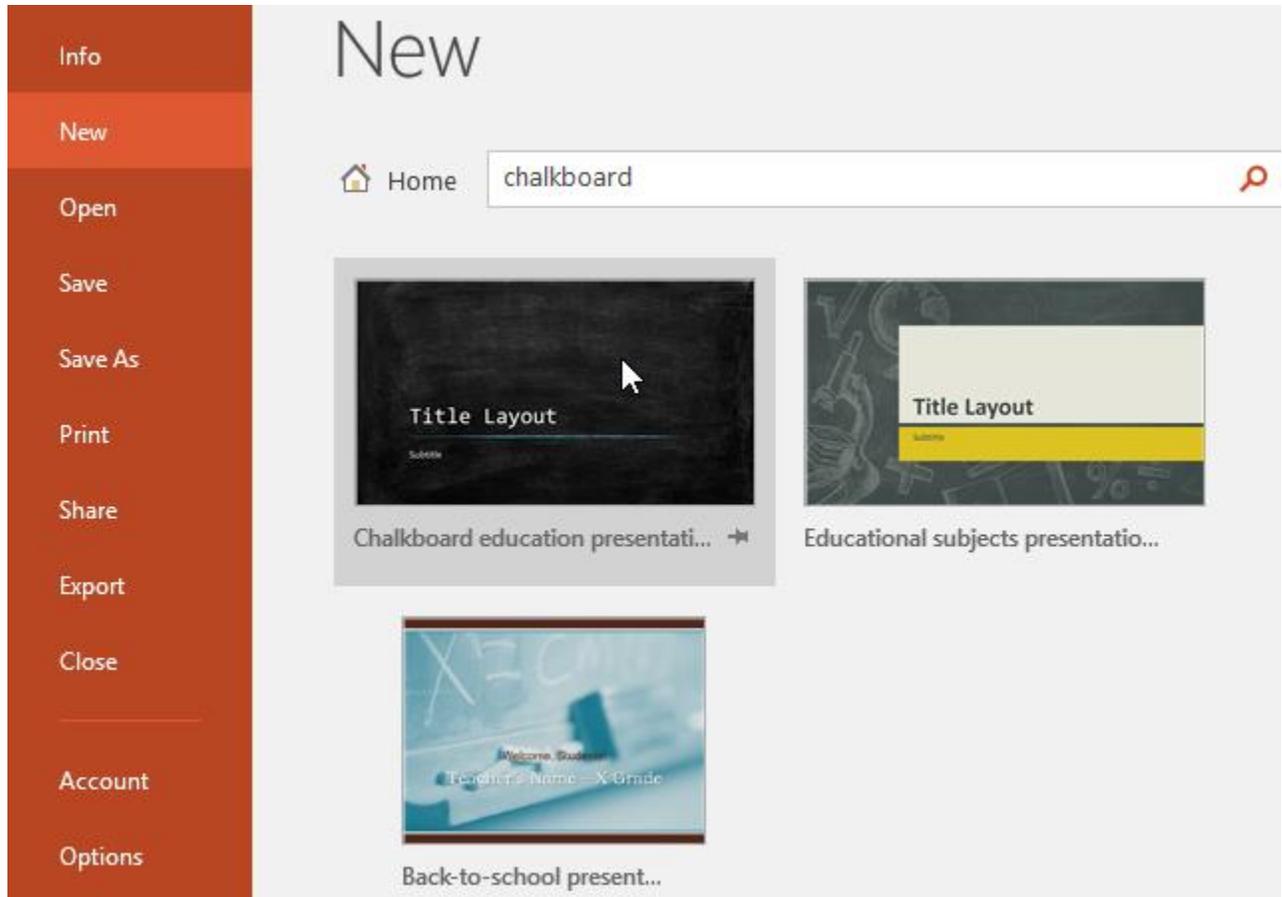
A **template** is a **predesigned presentation** you can use to create a new slide show quickly. Templates often include **custom formatting** and **designs**, so they can save you a lot of time and effort when starting a new project.

1. Click the **File** tab to access **Backstage view**, then select **New**.

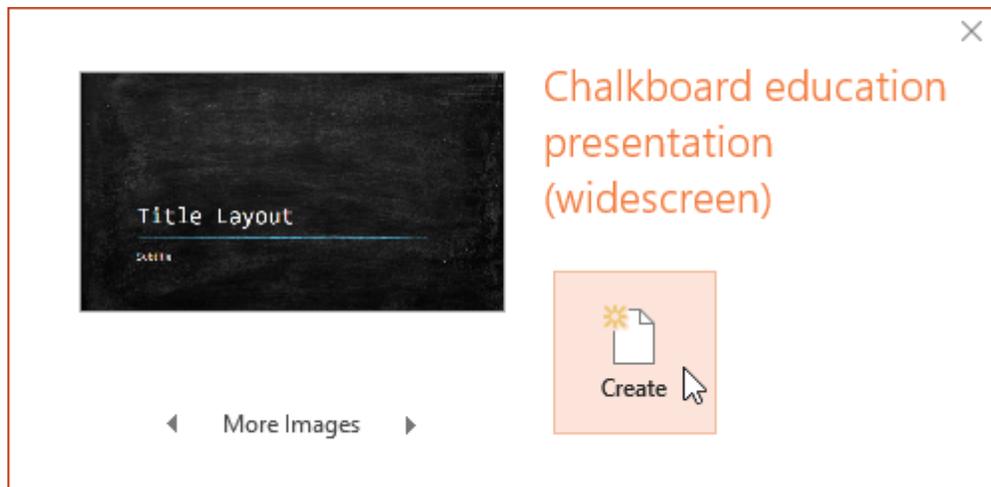
2. You can click a suggested search to find templates or use the **search bar** to find something more specific. In our example, we'll search for the keyword **chalkboard**.



3. Select a **template** to review it.



4. A **preview** of the template will appear, along with **additional information** on how the template can be used.
5. Click **Create** to use the selected template.



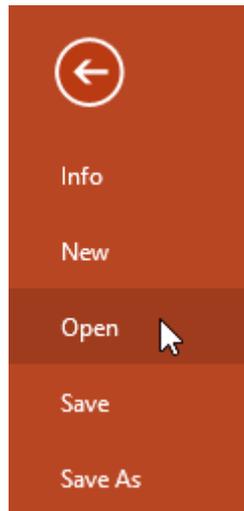
6. A new presentation will appear with the **selected template**.

It's important to note that not all templates are created by Microsoft. Many are created by third-party providers and even individual users, so some templates may work better than others.

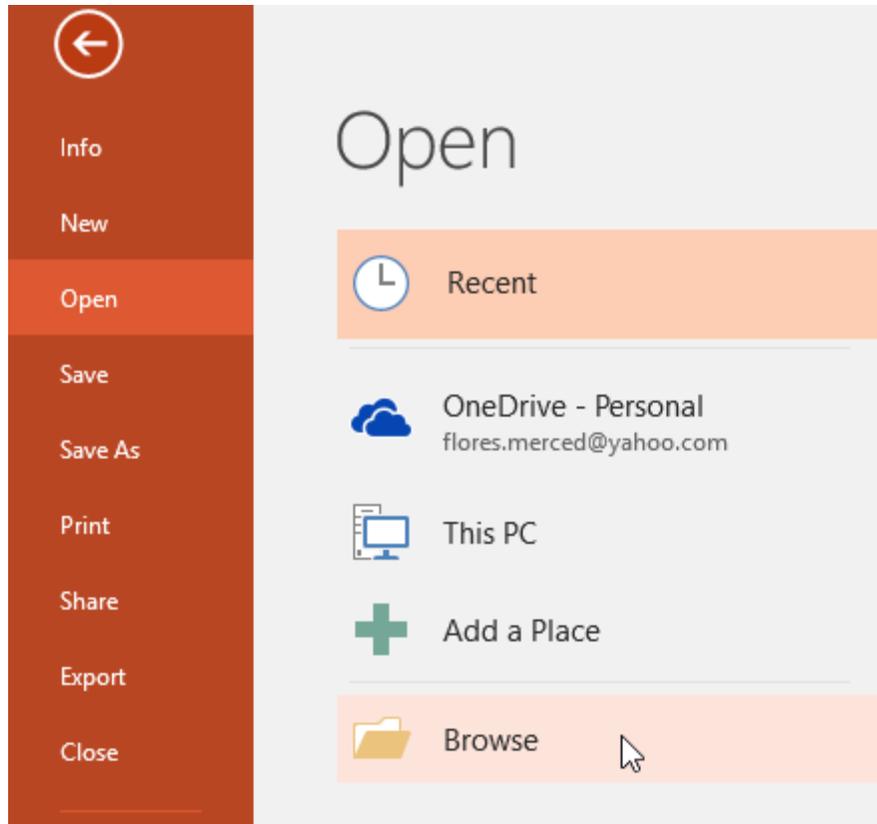
## *To open an existing presentation:*

In addition to creating new presentations, you'll often need to open a presentation that was previously saved. To learn more about saving presentations, visit our lesson on **Saving Presentations**.

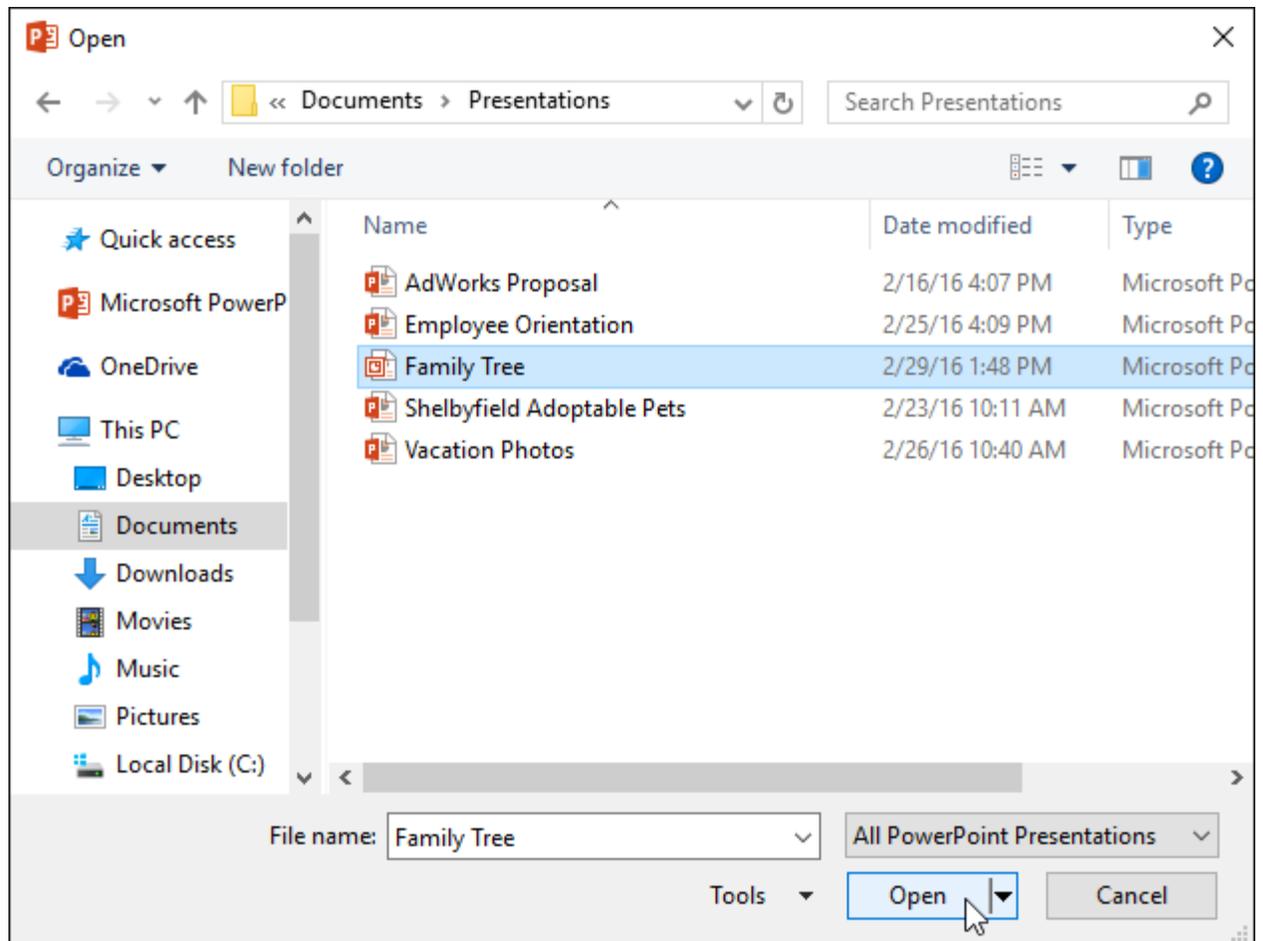
1. Select the **File** tab to go to **Backstage view**, then click **Open**.



2. Click **Browse**. Alternatively, you can choose **OneDrive** to open files stored on your OneDrive.



3. The **Open** dialog box will appear. Locate and select your **presentation**, then click **Open**.

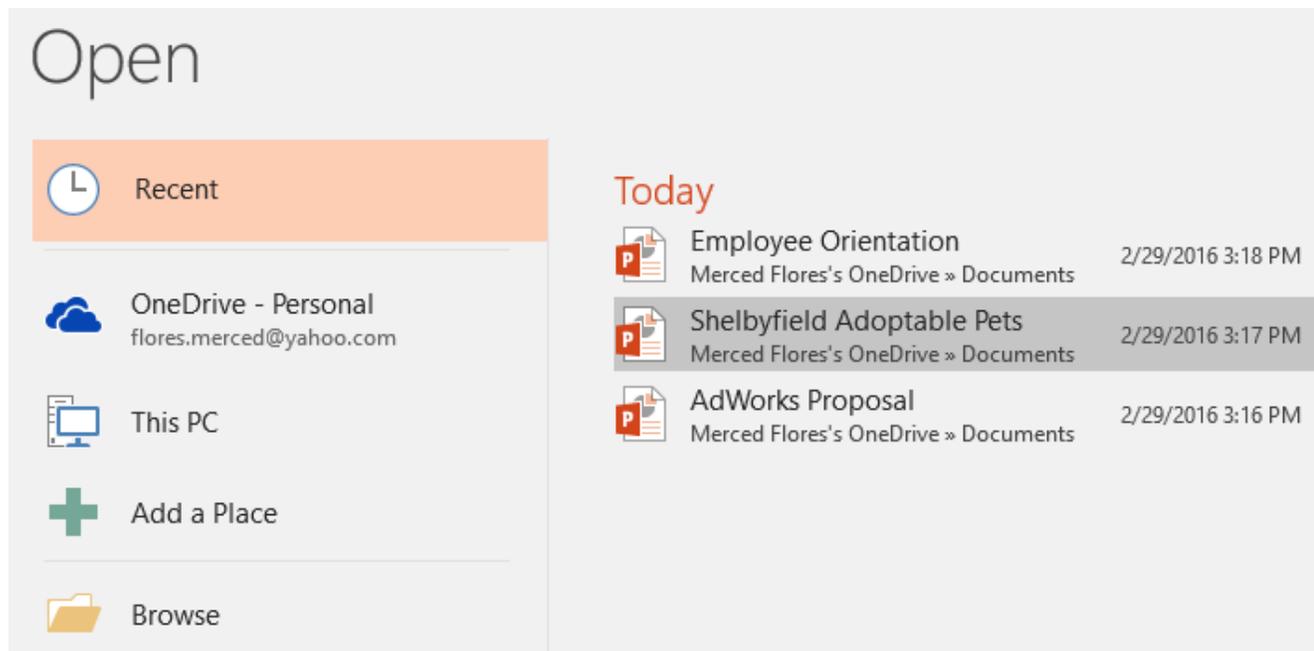


Most features in Microsoft Office, including PowerPoint, are geared toward saving and sharing documents **online**. This is done with **OneDrive**, which is an online storage space for your documents and files. If you want to use OneDrive, make sure you're signed in to PowerPoint with your Microsoft account. Review our lesson on [Understanding OneDrive](#) to learn more.

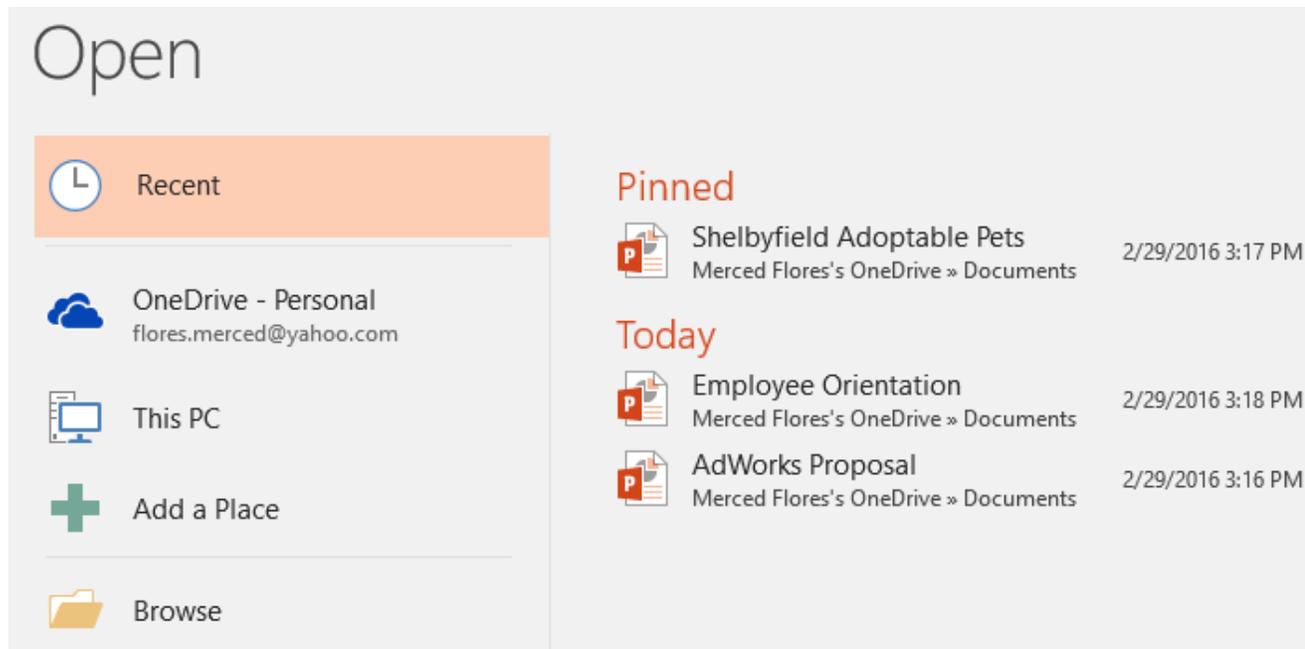
## *To pin a presentation:*

If you frequently work with the **same presentation**, you can **pin it** to Backstage view for easy access.

1. Select the **File** tab to go to **Backstage view**, then click **Open**. Your **Recent Presentations** will appear.
2. Hover the mouse over the **presentation** you want to pin, then click the **pushpin icon**.



3. The presentation will stay in the **Recent presentations** list until it is unpinned. To **unpin** a presentation, click the pushpin icon again.



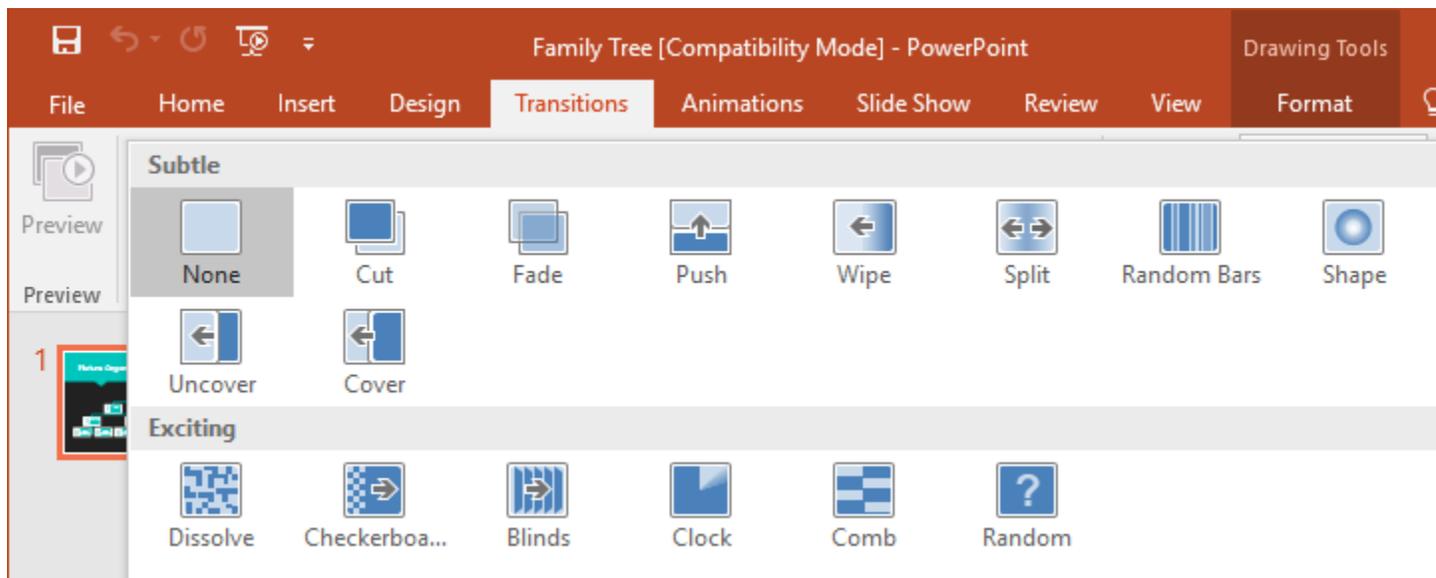
# Compatibility Mode

Sometimes you may need to work with presentations that were created in earlier versions of PowerPoint, like PowerPoint 2003 or PowerPoint 2000. When you open these types of presentations, they will appear in **Compatibility Mode**.

Compatibility Mode **disables** certain features, so you'll only be able to access commands found in the program that was used to create the presentation. For example, if you open a presentation created in PowerPoint 2003, you can only use tabs and commands found in PowerPoint 2003.

In the image below, you can see at the top of the window that the presentation is in Compatibility Mode. This will disable

some PowerPoint 2016 features, including newer types of slide transitions.



To exit Compatibility Mode, you'll need to **convert** the presentation to the current version type. However, if you're collaborating with others who only have access to an earlier version of PowerPoint, it's best to leave the presentation in Compatibility Mode so the format will not change.

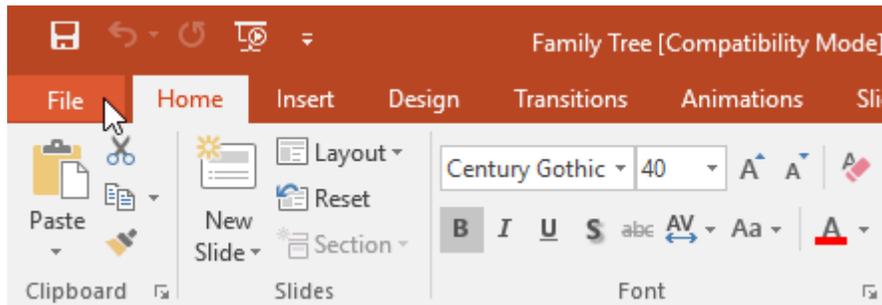
You can review this [support page](#) from Microsoft to learn more about which features are disabled in Compatibility Mode.

## *To convert a presentation:*

If you want access to all PowerPoint 2016 features, you can **convert** the presentation to the 2016 file format.

Note that converting a file may cause some changes to the **original layout** of the presentation.

1. Click the **File** tab to access Backstage view.



2. Locate and select the **Convert** command.



3. The **Save As** dialog box will appear. Select the **location** where you want to save the presentation, enter a **file name**, and click

4. The presentation will be converted to the newest file type.

# Challenge!

1. Open our **practice presentation**.
2. Notice that the presentation opens in **Compatibility Mode**. **Convert** it to the 2016 file format. If a dialog box appears asking if you would like to close and reopen the file in order to see the new features, choose **Yes**.
3. In Backstage view, **pin** a file or folder.

»Save the presentation as Lab1.pptx

**Answer:- change the default file save option so that you save as a .ppt file instead of a .pptx file in Powerpoint for Office 365.**

- **Some features of Powerpoint may not be compatible with the .ppt file format.**
- **Using the .ppt file format instead of .pptx is a good idea if you often work with people that have trouble opening .pptx files, such as those using much older versions of Powerpoint.**

Older versions of Microsoft Powerpoint used to create files in the .ppt file format by default.

But, with the introduction of Powerpoint 2010, this default file format was replaced with a new one called .pptx.

Newer versions of Powerpoint are able to work with both file types seamlessly, and many other applications, such as Google Slides, can handle Powerpoint files as well.

But there are some situations where you might encounter problems with the .pptx file format and need to switch over to the .ppt file format. Our guide below will show you how to change a setting so that you use the .ppt file format by default when creating new slideshows in Powerpoint.

## **How to Use the .PPT File Format By Default in Powerpoint for Office 365**

The steps in this article were performed in the Microsoft Powerpoint for Office 365 version of the application. This will also work in other newer versions of Powerpoint such as Powerpoint 2016 and Powerpoint 2019.

Step 1: Open Powerpoint.

Step 2: Select the **Options** button at the bottom-left corner of the window.

Step 3: Click the **Save** tab at the left side of the window.

Step 4: Click the dropdown menu to the right of **Save files in this format**.

Step 5: Choose the **Powerpoint Presentation 97 – 2003** option.

Step 6: Click the **OK** button at the bottom of the window.

»Add a title to the first slide: the name of your college

Answer:- To start, click in **the** text box on **the title slide**, and type in **a title** for **your** presentation. **Add a** subtitle that further describes **your** presentation, or use **the subtitle to add your name** or job **title. a slide to your** presentation. Select **a slide** layout from **the** dropdown menu. If Next, add **your** presentation will have several sections, **add a ...**

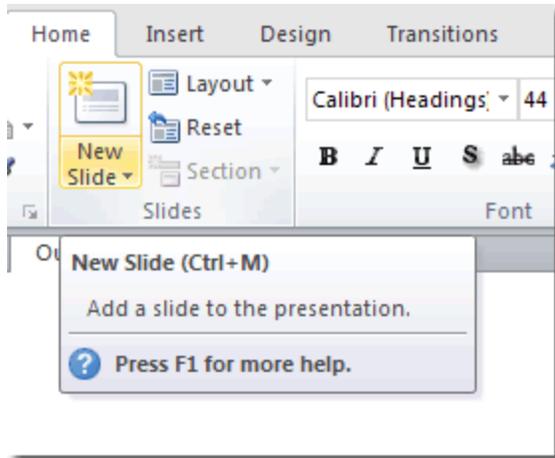
»Type your first name and last name in the subtitle section

Answer:- As a Portuguese person with four **names**, living **in the** UK for a few years now, I've found that putting my **first 2 names** as **First Names** and my **last 2 names** as **Last Names** works virtually everywhere. I got to this conclusion after having a British Airways staff person telling me **the** system couldn't find my tickets automatically because I had filled them **in** with 1 **first name**, 1 middle **name**, and 2 **last names**.

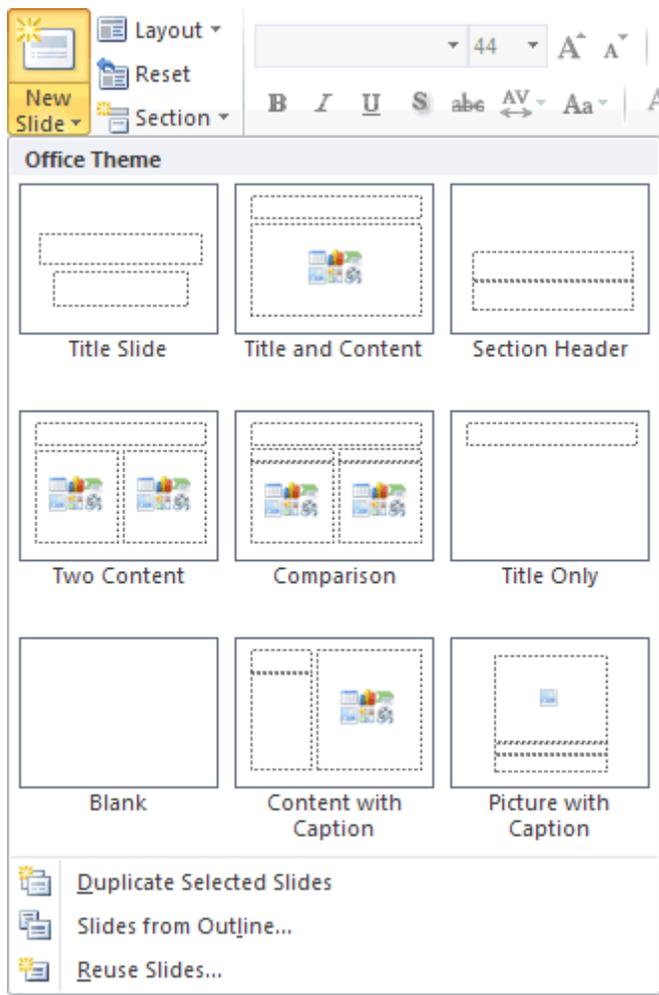
»Add a New slide which has a Title and content

Answer:- There are a couple of ways to add a new slide. In each way, the slide that is currently selected is important as the new slide will be placed after the selected one. This means that if you want to insert a slide before the end of the presentation, you will need to select the slide that appears before the one you want to insert. To select the slide, just click on it. You can select the slide in whichever view you happen to be using, whether it's Slides View or Outline View.

Once you have selected a slide, click Home > Slides > New Slide. You'll notice that the New Slide button is in two halves.



If you click the top half of the New Slide button, the default Title and Content type slide will be added. If, instead, you click the bottom half of the button, you will be able to select what type of slide is added.



Once the new slide has been added, you can click into one of the editable content boxes to make your changes.

The keyboard shortcut for adding new slides is **ctrl-m**.

Q15. Write steps for creation of a set of power point slides that demonstrates your skill to use the tools of power point. It should include the following things.

**Answer:-**

1. Step 1: Launch the PowerPoint Program. ...
2. Step 2: Choosing a Design. ...
3. Step 3: Create Title Page. ...
4. Step 4: Add More Slides. ...
5. Step 5: Add Charts, Pictures, Graphs, Etc. ...
6. Step 6: Add Transitions. ...
7. Step 7: Changing the Order. ...
8. Step 8: Play the Presentation.

### **Title slide&bullet list**

Creating a simple bulleted list slide

- Start Microsoft PowerPoint.
- Open arbitrary existing PowerPoint presentation.
- Click the New Slide button on the Formatting toolbar. ...
- Click the Bulleted List layout, as shown in the above figure. ...
- Click the title placeholder (where it says: "Click to Add Title"). ...
- Type some text.

### **Inserting Excel Sheet**

- 1)How do you add a new worksheet to the right?
- 2)To insert a single new worksheet to the right of the currently selected worksheet, click the "New Sheet" button at the right end of the spreadsheet name tabs. Alternatively, you can also click the "Insert"

drop-down button in the “Cells” button group on the “Home” tab of the Ribbon

### **Clip art and Text**

How do you make text art?

1. Step 1: Choose a Picture. Choose any image from the internet or from your desktop.
2. Step 2: Copy the Picture Into Word. Open a new Word-document and paste the picture into it.
3. Step 3: Set the Image Properties.
4. Step 4: Set the Font and Begin to 'paint'
5. Step 5: Finish.

### **Slide show effects**

animations and effects

1. Select the object or text you want to animate.
2. Select Animations and choose an animation.
3. Select Effect Options and choose an effect

Part -2

Q16.What in difference between Machine Language and High Level Language?

Answer:- Machine language, or machine code, is the only language that is directly understood by the computer, and it does not need to be translated. All instructions use binary notation and are written as a string of 1s and 0s. A program instruction in machine language may look something like this:

1. 10010101100101001111101010011011100101

A high-level language is a programming language that uses English and mathematical symbols, like +, -, % and many others, in its instructions. When using the term 'programming languages,' most people are actually referring to high-level languages. High-level languages are the languages most often used by programmers to write programs. Examples of high-level languages are C++, Fortran, Java and Python. To get a flavor of what a high-level language actually looks like, consider an ATM machine where someone wants to make a withdrawal of \$100. This amount needs to be compared to the account balance to make sure there are enough funds. The instruction in a high-level computer language would look something like this:

1. x = 100
2. if balance x:
3. print 'Insufficient balance'
4. else:
5. print 'Please take your money'

This is not exactly how real people communicate, but it is much easier to follow than a series of 1s and 0s in binary code.

There are a number of advantages to high-level languages.

The first advantage is that high-level languages are much closer to the logic of a human language.

The second advantage is that the code of most high-level languages is portable and the same code can run on different hardware

Q17. Discuss about different data types of c programming Language.

Answer:- Data types in C programming language

One of the most important concept in programming is the variable. The variable can be seen as the “place” to store “things” as: numerical values, characters, text strings, memory addresses, etc. There are two main concepts regarding variables. The first concept is the declaration of the variable, which basically means setting its data type. The second

concept is the definition of the variable, which means setting its content.

In the C programming language every variable used in the source code needs to be declared by setting its data type. By assigning a certain data type to a variable we define several aspects linked to the variable:

- the memory size to be allocated to store the content of the variable
- the types of operations that can be performed on the variable
- the restrictions which are applied in terms of operations

By the end of this tutorial the reader will know:

- what is the significance of a data type
- how to declare and define a variable
- which are the properties of the standard data types
- what is integer overflow

In the C programming language a variable is declared as:  
where:

uivar – is the name of the variable  
unsigned – keyword which defines that our variable is always positive  
(without the sign “-“)

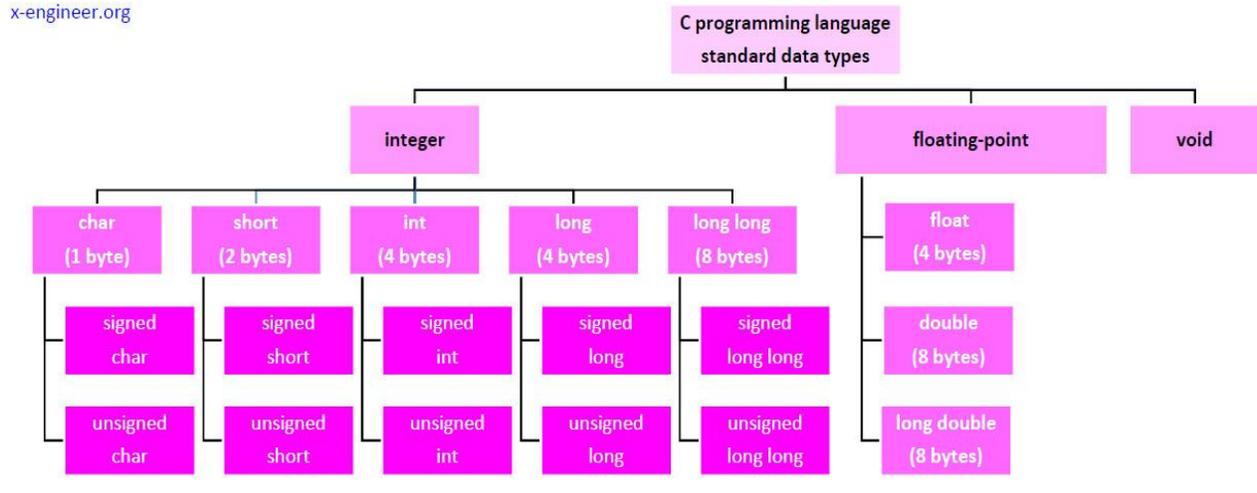
int – keyword which defines that our variable is an integer and has 4 bytes of memory allocated (for a 32-bit compiler)

The **definition** of the variable can be done in another line, but only after the declaration:

Variables can be **declared and defined** in the same instruction:

The main data types in C programming language are:

- integer (fixed-point)
- floating-point
- void



Q18. Find the output of the following expressions.

a)  $X=20/5*2+30-5$

$$X = \frac{20}{5-2} + 30-5$$

$$X = \frac{20}{3} + 25$$

$$X = \frac{20+75}{3}$$

$$X = \frac{95}{3}$$

b)  $y=30 - (40/10+6)+10$

$$y = 30 - \left( \frac{40}{10+6} \right) + 10$$

$$Y = 30 - \left( \frac{40}{16} \right) + 10$$

$$Y = 30 - \frac{40}{16} + 10$$

$$Y = \frac{480-40+160}{16}$$

$$Y = \frac{640-40}{16}$$

$$Y = \frac{600}{16}$$

$$Y = \frac{75}{2}$$

c)  $z=40*2/10-2+10$

$$Z = 40 - \frac{2}{10} - 2 + 10$$

$$Z = 40 - \frac{1}{5} - 2 + 10$$

$$Z = \frac{200-1-10+50}{5}$$

$$Z = \frac{250-11}{5}$$

$$Z = \frac{239}{5}$$

Q19. Describe the syntax of the following statement

Answer:- There are five types of SQL commands: DDL, DML, DCL, TCL, and DQL.

- Data Definition Language (DDL) DDL changes the structure of the table like creating a table, deleting a table, altering a table, etc. ...
- Data Manipulation Language. ...
- Data Control Language. ...
- Transaction Control Language. ...
- Data Query Language.

### **( a ) If – else statement**

An if else Python statement evaluates whether an expression is true or false. If a condition is true, the “if” statement executes. Otherwise, the “else” statement executes. Python if else statements help coders control the flow of their programs.

### **(b) for loop**

What are the 3 types of loops?

Loops are control structures used to repeat a given section of code a certain number of times or until a particular condition is met. Visual Basic has three main types of loops: for.. next loops, do loops and while loops.

### **(c) while loop**

What is a while loop ?

Overview. The while construct consists of a block of code and a condition/expression. ... This repeats until the condition/expression becomes false. Because the while loop checks the condition/expression before the block is executed, the control structure is often also known as a pre-test loop.

### **(d) do-while loop**

What is a do while loop ?

Do While Loop Flow Chart

Execute/Run a group of statements within the **C** Programming loop.

Next, use Increment and Decrement Operator inside the loop to

increment or decrements the values. Next, it checks the while condition. If the condition output is True, the code inside the C Do while loop executes again

Q20. Find the output of the following program segments.

Answer:-

**(a) Find the output of the following program.**

```
def fun(s):
    n = len(s)
    m=""
    for i in range(0, n):
        if (s[i] >= 'a' and s[i] <= 'm'):
            m = m + s[i].upper()
        elif (s[i] >= 'n' and s[i] <= 'z'):
            m = m + s[i-1]
        elif (s[i].isupper()):
            m = m + s[i].lower()
        else:
            m = m + '#'
    print(m)
fun('Gini%Jony')
glil#jJon
```

**(b) Find the output of the following program.**

```
def Withdef(HisNum = 30):
    for i in range(20,HisNum+1,5):
        print(i, end=" ")
    print()
def Control(MyNum):
    MyNum = MyNum + 10
    Withdef(MyNum)
YourNum = 25;
Control(YourNum);
Withdef();
```

```
print("Number = " ,YourNum)
20 25 30 35
20 25 30
Number = 25
```

**(c) Find the output of the following program.**

```
def Position(C1, C2, C3):
    C1[0] = C1[0] + 2
    C2 = C2 + 1
    C3 = "python"
P1 = [20]
P2 = 4
P3 = "school"
Position(P1, P2, P3);
print(P1, " ", P2, " ", P3)
[22], 4, school
```

```
#include int main() { int i; for (i=1; i int main() { int i = 1; while ( i <= 2 ) {
printf( "IMS Ghaziabad\n"); i = i + 1; } } #include void main() { int a = 10,
b=100; if( a > b ) printf( "Largest number is %d\n", a);
```

- Make sure that all words are spelled correctly.
- Try different keywords.
- Try more general keywords.
- Try fewer keywords.